

DECLARATION UNDER 37 C.F.R. 1.132  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Yong-jin AHN et al.

Application No. 10/806,318

Group Art Unit: 2627

Confirmation No. 1757

Filed: March 23, 2004

Examiner: Lixi Chow

For: METHOD OF AND APPARATUS FOR RECORDING DATA ON OPTICAL RECORDING  
MEDIUM

Declaration Under Rule 132

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I, Kyung-geun LEE, have reviewed the above identified patent application, references, and arguments set forth in the Office Action and declare as follows:

1. I have a degree in Master of Art from Univ. of Texas and have 17 years of experience in the field of optical storage and am aware of the state of the art from the time of 1989 and 2006.
2. I have reviewed and understand the references, the claims, and the arguments in the Office Action;
3. I have not found Ichihara (U.S. Patent No. 6,396,792) teaches adjusting a power of a period between a first one of the multi-pulses of the recording pattern and a last one of the multi-pulses of the erase pattern, or that such power should be one of the powers Pc1, Pc2 of the erase pattern of Ichihara for the following reasons:
  - a. col. 6, line 64 to col. 7, line 6 of Ichihara is as below:

"The timing between the first pulse and the last off pulse during creation of an amorphous mark can be determined adequately. For example, the level may be changed from Pc1 to Pa, Pc2 to Pa, or to Pa after once returning it to the conventionally used Pc level. The essential of the present invention lies in the crystallization power level in form of pulses to ensure the entire area in the width direction of the recording track uniformly passes the temperature zone promoting generation of crystal nuclei."

- b. while poorly translated from Japanese, from my experience, col. 6, line 64 to col. 7, line 5 relates to the first pulse and the last off pulse of the amorphous mark, where adjustments are made to the timing of the amorphous mark, and adjustments are made to the power levels of the first pulse and the power level of the last off pulse;
  - c. as shown in FIG. 1B, the first pulse of the amorphous mark is at a level  $P_a$  and is after period at a level  $P_c$ , and the last off pulse of the amorphous mark is at a level labeled  $P_{c2}$ ;
  - d. from my experience in the field of the invention, col. 6, line 64 to col. 7, line 5 discusses allowing the first pulse of the amorphous pulse to be at a power level between  $P_{c1}$  and  $P_a$ , and the last off pulse to be at a power level between  $P_{c2}$  and  $P_a$  or  $P_c$  and  $P_a$ ;
  - e. col. 6, line 64 to col. 7, line 5 does not describe the period prior to the first pulse of the amorphous mark, which is shown at the power level  $P_c$ , and does not discuss this period being at  $P_{c1}$  or  $P_{c2}$  power levels;
  - f. from my working knowledge of Japanese, I confirmed this understanding relative to paragraph 0035 of corresponding Japanese Patent Publication No. 2000-123367. Paragraph 0035 also describes the first pulse and the last off pulse of the amorphous mark, but do not describe varying the period prior to the first pulse of the amorphous mark, which is shown at a power level  $P_c$ ; and
  - g. the remainder of Ichihara beyond col. 6, line 64 to col. 7, line 5 does not describe the period prior to the first pulse of the amorphous mark, which is shown at a power level  $P_c$ , to be adjusted to another power.
4. Based upon my review, I did not find that Ichihara discusses, as would be understood by one of ordinary skill in the art, the following features:
- a. "a power level of the leading pulse of the second pulses is the low power level of the multi-pulse and a power level of a period between an end point of the second pulses and a start point of the first pulses is the high power level of the multi-pulse" as recited in claim 1;
  - b. "a power level of the leading pulse is the low power level of the multi-pulse and a power level of a period between an end point of the multi-pulse and a start point of the first pulses is the high power level of the multi-pulse" as recited in claim 5;
  - c. "the leading pulse of the second pulses being at the low power level of the multi-pulse and a power level of a period between an end point of the multi-pulse and a start point of the first pulses being the high or low power level of the multi-pulse" as recited in claim 7;
  - d. "a power of the leading pulse of the second pulses is equal to a power of a period between an end point of the second pulses and a start point of the first pulses" as recited in claim 10; and
  - e. "a power level of the leading pulse of the second pulses is at the high power level of the multi-pulse and a power level of a period between an end point of the second pulses and a start point of the first pulses is at the high power level of the multi-pulse" as recited in claim 19.

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Docket No.: 1293.1278C4

The Declarant further states that the above statements were made with the knowledge that willful false statements and the like are punishable by fine and/or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that any such willful false statement may jeopardize the validity of this application or any patent resulting therefrom.

By: Kyung-geun Lee  
Kyung-geun LEE

Date 4 April 2007